

PHILLYREA

Vessels typically small (less than 100 μ mean tangential diameter) apart from those of the pore zone, and sometimes extremely small (less than 25 μ) with vessels grouped in broad oblique masses (dendritic); usually more than 20 and up to about 200 per sq. mm. Ring-porous or semi-ring-porous in some spp. With spiral thickening in some spp. Perforations typically simple. Intervascular pitting alternate, very small to minute. Pits to ray and wood parenchyma similar to the intervacular pitting. Mean member length 0.2-0.6 mm.

Parenchyma typically predominantly paratracheal, the paratracheal parenchyma varying from a few cells touching the vessels (scanty) to complete sheaths (vasicentric) that tend locally to become aliform or confluent; sometimes absent or extremely sparse (apart from terminal bands); sometimes with distinct terminal bands. Strands usually up to 8 cells.

Rays typically 2-3 cells wide. Less than 1 mm. high. Uniseriates tending to be few and low, sometimes of mixed upright and procumbent cells (but may apparently be upright only). 5-16 rays per mm. Heterogeneous (Kribs's Type II) to homogeneous (Kribs's Types I and II). Heterogeneous rays usually with 1-3 marginal rows of square or upright cells; the marginal cells sometimes square and not distinguishable in shape from the procumbent cells in tangential sections. Sometimes arranged locally in echelon.

Fibres usually with small simple or indistinctly bordered pits. Pits usually mostly in radial walls. Walls thin to very thick. Mean length 0.8-1.45 mm.

Vasicentric tracheids with spiral thickening in P. media.

Phillyrea media L.

Diffuse-porous. Pores in flame-like arrangement; very small, maximum tangential diameter 45 μ ; numerous and crowded within the pattern. Vessels with simple perforations; pits alternate, very small to small, not crowded; extended inner apertures of pits coalesce to form spiral striations which may appear to be spiral thickenings. Wood parenchyma paratracheal, abundant within the pore pattern terminal. Rays

heterogeneous, upright cells both marginal in tiers of 2 to 4 and intersperced with the procumbent cells; 2 to 3 cells wide; less than 15 cells high; ray-vessel pitting fine, short oval in outline. Fibres with simple or indistinctly bordered pits. Crystals in wood parenchyma and ray cells. Vascentric tracheids not observed. (Ilanoth Specimen No. 12)